REPRODUCTION, REPRODUCTION DISORDERS AND CLINICAL LECTURES ON SPECIES 2

Study program	Veterinary Medicine
Year of study	IV
Semester	II
Regime of discipline	DOB
Discipline category	Dsc
Number of lectures hours per week	2
Number of seminar/laboratory/project hours per week	28
Total number of hours according to the curriculum: lectures/seminars/laboratory/project	28 hours lectures/ 28 seminars
Number of transferable credits	4

SPECIFIC SKILLS

Professional Competence	**C1** The assimilation by learning of the notions related to the application of the diagnostic methods of gestation both laboratory and clinical in different species **C2** Consolidation of theoretical knowledge and practical skills of gynaecological examination of large animals and small by learning semiotics of each species for a correct obstetric diagnosis. **C3** Consolidation of theoretical and practical knowledge of using different obstetrical tools (obstetrical hooks, ropes, etc) to solve a dystocia in large and small animals **C4** Consolidation of knowledge regarding the best moment of obstetrical intervention, bloody and not bloody, in relation with the moment of the begining the parturition, in order to save the live of fetus/es and the mother. **C5** Consolidation of knowledge regarding the clinical differentiation of some genetic malformation of fetus/es that can lead to dystocia. **C6** Consolidation of knowledge regarding the theoretical and practical skills regarding the examination of the mammary gland **C7** Consolidation of competences regarding the use of breeding records in cattle farms

LEARNING OUTCOMES

Knowledge	The student/graduate identifies the stages of sexual life in different animal species and understands the physiology and pathology of reproduction in various animal species.
Skills	The student/graduate applies knowledge regarding the morphophysiological changes of the genital apparatus during different stages of reproductive life, as well as in cases of specific pathologies in animals.
Responsibility and autonomy	The student/graduate examines and applies: • Transrectal examination and vaginal examination in different animal species; • Pregnancy diagnosis; • Semen collection in different animal species; • Artificial insemination techniques; • Diagnosis and management of dystocia; • Reproductive calendar (breeding calendar); • Instruments used in dystocia management

COURSE OBJECTIVES

General objective of the course	Theoretical and practical training regarding obstetrical examination in large and small animals. Theoretical and practical training related with establishing obstetrical diagnosis in large and small animals.

	Theoretical and practical training in order to be able to manipulate the fetus/es in order not to create to much trauma in mother or fetus/es. Development of correlative interpretation of clinical signs, data ouner records and imagistic examination for establishing a correct obstetrical diagnostic. Competency assurance for doing research in veterinary medicine field.
Specific objectives	To get the knowledge regarding the manipulation foetuses in order not to create trauma both mother and conceptus. To be able to explain the Pathophysiological mechanism and alignment of endocrine events witch lead to obstetrical disease. To accumulate theoretical and practical skills in order to establish a gynaecological diagnostic in different animal. To get the information of how to fill all the paper in a reproductive clinic. To be able to use specific ecbolic agents (prostaglandin and oxytocin) in animal welfare interests.

COURSE CONTENT

LECTURES	Number of hours
Pregnancy and Pathology of gestation	4
The pathology of the placenta	2
Abortions	4
The transformation of the dead or retained fetus	2
Normal birth in animals	4
Changes in the fetus during the perinatal period	2
Maternal dystocia	4
Fetal dystocia	4
Postparturient problems in large animals	2
SEMINAR/LABORATORY	Number of hours
Occupational Health and Safety regulations	2
Review: Anatomical and morphophysiological aspects of the female genital apparatus.	2
Study of the pelvis from an obstetrical perspective. Internal and external pelvimetry.	2
Transrectal examination and artificial insemination technique – theoretical notions.	2
Transrectal study of the pelvis from an obstetrical perspective – practical notions.	2
Obstetrical dispositions, presentations, and positions. Retention of the forelimbs.	2
Retention of the hind limbs. Instruments used in dystocia.	2
Periodic evaluation of the acquired knowledge – written test.	2
Pregnancy diagnosis in cows – theoretical notions.	2
Mammary gland in cows and other species. Examination of the mammary gland. Tests used for the detection of mastitis.	2
Physiological and pathological gynecological categories. Reproductive calendar.	2
Reproductive indices.	2
Periodic evaluation of the acquired knowledge – written test.	2
Final evaluation	2

BIBLIOGRAPHY:

- Bovine reproduction Richard Hopper 2015 John Wiley & Sons, Inc.
- Handbook of veterinary obstetrics 2004– second edition Peter GG jackson - Sounders
- www. merckvetmanual.com
- Noakes D.E., Parkinson J.T., England G., C.W. 2009– Veterinary Reproduction and Obstetrics 9th Edition. (2009) Sounders, Edinburgh, England
- Canine and Feline Reproduction and Neonatology 2013 Gary England, Angelika von Heimendhal BSAVA

ASSESSMENT

Activity type	Assessment criteria	Assessment methods	Percentage of final grade
Lectures	• Description, using appropriate terminology, of reproductive disorders and incidents specific to the	Oral examination – development of answers based on two topics	50%

	gestation and parturition periods in female farm and companion animals. • Integration of theoretical knowledge with clinical and paraclinical investigations in establishing the clinical and differential diagnosis in order to determine the appropriate therapeutic approach. • Application of knowledge previously acquired in preclinical disciplines (anatomy, histology, physiology, pathophysiology, biochemistry, genetics, nutrition, pharmacology, etc.) in the description of reproductive diseases and disorders in animals, and the integration of this knowledge into their broader clinical and etiopathogenetic context.		
Seminar/laboratory/clinical sessions	• Knowledge of the morphology and morphophysiology of the female reproductive system and the particularities of the pelvis from an obstetrical perspective. • Acquisition and correct application of transrectal examination techniques and knowledge of artificial insemination techniques. • Recognition of obstetrical dispositions, presentations, and positions, as well as the main types of dystocia and the instruments used for their management. • Knowledge of pregnancy diagnosis methods in cows and of the elements involved in the examination of the mammary gland, including tests used for the detection of mastitis. • Understanding physiological and pathological gynecological categories and interpretation of the reproductive calendar and reproductive indices.	Eligibility for the oral examination requires passing two tests during the semester, each with a minimum grade of 5	50%
Other activities			

Course coordinator: Assoc.Prof. dr. Mircu Călin
Practical activities coordinator L/S/P: Assist. Prof. dr. Torda Iuliu